



SEQUENCE LISTING

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NAGAI, RYOZO
KIMURA, SATOSHI
TOMITA, MOTO

<120> INSULIN RESISTANCE IMPROVING AGENT

<130> 256653US0PCT

<140> 10/502,051
<141> 2004-07-30

<150> PCT/JP02/07599
<151> 2002-07-26

<150> JP 2002-23554
<151> 2002-01-31

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<170> PatentIn version 3.3

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<221> CDS
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gac cag gaa acc acg actcaa ggg ccc gga gtc ctg ctt ccc ctg ccc
Asp Gln Glu Thr Thr Gln Gly Pro Gly Val Leu Leu Pro Leu Pro
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aag ggg gcc tgc aca ggt tgg atg gcg ggc atc cca ggg cat ccg ggc
Lys Gly Ala Cys Thr Gly Trp Met Ala Gly Ile Pro Gly His Pro Gly
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cat aat ggg gcc cca ggc cgt gat ggc aga gat ggc acc cct ggt gag

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Lys Gly Ala Cys Thr Gly Trp Met Ala Gly Ile Pro Gly His Pro Gly
35 40 45

His Asn Gly Ala Pro Gly Arg Asp Gly Arg Asp Gly Thr Pro Gly Glu
50 55 60

Lys Gly Glu Lys Gly Asp Pro Gly Leu Ile Gly Pro Lys Gly Asp Ile
65 70 75 80

Gly Glu Thr Gly Val Pro Gly Ala Glu Gly Pro Arg Gly Phe Pro Gly
85 90 95

Ile Gln Gly Arg Lys Gly Glu Pro Gly Glu Gly Ala Tyr Val Tyr Arg
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Ser Ala Phe Ser Val Gly Leu Glu Thr Tyr Val Thr Ile Pro Asn Met
115 120 125

Pro Ile Arg Phe Thr Lys Ile Phe Tyr Asn Gln Gln Asn His Tyr Asp
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Gly Ser Thr Gly Lys Phe His Cys Asn Ile Pro Gly Leu Tyr Tyr Phe
145 150 155 160

Ala Tyr His Ile Thr Val Tyr Met Lys Asp Val Lys Val Ser Leu Phe
165 170 175

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180 185 190

Asn Val Asp Gln Ala Ser Gly Ser Val Leu Leu His Leu Glu Val Gly
195 200 205

Asp Gln Val Trp Leu Gln Val Tyr Gly Glu Gly Glu Arg Asn Gly Leu
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His Asp Thr Asn

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Gln Ala Leu Leu Phe Leu Leu Ile Leu Pro Ser His Ala Glu Asp Asp
5 10 15 20

gtt act aca act gaa gag cta gct cct gct ttg gtc cct cca ccc aag 153
Val Thr Thr Glu Glu Leu Ala Pro Ala Leu Val Pro Pro Pro Lys
25 30 35

gga act tgt gca ggt tgg atg gca ggc atc cca gga cat cct ggc cac 201
Gly Thr Cys Ala Gly Trp Met Ala Gly Ile Pro Gly His Pro Gly His
40 45 50

aat ggc aca cca ggc cgt gat ggc aga gat ggc act cct gga gag aag 249
Asn Gly Thr Pro Gly Arg Asp Gly Arg Asp Gly Thr Pro Gly Glu Lys
55 60 65

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| tac cac atc acg gtg tac atg aaa gat gtg aag gtg agc ctc ttc aag Tyr His Ile Thr Val Tyr Met Lys Asp Val Lys Val Ser Leu Phe Lys 165 170 175 180 | 585 |
| aag gac aag gcc gtt ctc ttc acc tac gac cag tat cag gaa aag aat Lys Asp Lys Ala Val Leu Phe Thr Tyr Asp Gln Tyr Gln Glu Lys Asn 185 190 195 | 633 |
| gtg gac cag gcc tct ggc tct gtg ctc ctc cat ctg gag gtg gga gac Val Asp Gln Ala Ser Gly Ser Val Leu Leu His Leu Glu Val Gly Asp 200 205 210 | 681 |
| caa gtc tgg ctc cag gtg tat ggg gat ggg gac cac aat gga ctc tat Gln Val Trp Leu Gln Val Tyr Gly Asp Gly Asp His Asn Gly Leu Tyr 215 220 225 | 729 |
| gca gat aac gtc aac gac tct aca ttt act ggc ttt ctt ctc tac cat Ala Asp Asn Val Asn Asp Ser Thr Phe Thr Gly Phe Leu Leu Tyr His 230 235 240 | 777 |
| gat acc aac tga ctgcaactac ccatagccca tacaccagga gaatcatggaa Asp Thr Asn 245 | 829 |
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Ala Glu Asp Asp Val Thr Thr Glu Glu Leu Ala Pro Ala Leu Val
20 25 30

Pro Pro Pro Lys Gly Thr Cys Ala Gly Trp Met Ala Gly Ile Pro Gly
35 40 45

His Pro Gly His Asn Gly Thr Pro Gly Arg Asp Gly Arg Asp Gly Thr
50 55 60

Pro Gly Glu Lys Gly Glu Lys Gly Asp Ala Gly Leu Leu Gly Pro Lys
65 70 75 80

Gly Glu Thr Gly Asp Val Gly Met Thr Gly Ala Glu Gly Pro Arg Gly
85 90 95

Phe Pro Gly Thr Pro Gly Arg Lys Gly Glu Pro Gly Glu Ala Ala Tyr
100 105 110

Met Tyr Arg Ser Ala Phe Ser Val Gly Leu Glu Thr Arg Val Thr Val

115

120

125

Pro Asn Val Pro Ile Arg Phe Thr Lys Ile Phe Tyr Asn Gln Gln Asn
130 135 140

His Tyr Asp Gly Ser Thr Gly Lys Phe Tyr Cys Asn Ile Pro Gly Leu
145 150 155 160

Tyr Tyr Phe Ser Tyr His Ile Thr Val Tyr Met Lys Asp Val Lys Val
165 170 175

Ser Leu Phe Lys Lys Asp Lys Ala Val Leu Phe Thr Tyr Asp Gln Tyr
180 185 190

Gln Glu Lys Asn Val Asp Gln Ala Ser Gly Ser Val Leu Leu His Leu
195 200 205

Glu Val Gly Asp Gln Val Trp Leu Gln Val Tyr Gly Asp Gly Asp His
210 215 220

Asn Gly Leu Tyr Ala Asp Asn Val Asn Asp Ser Thr Phe Thr Gly Phe
225 230 235 240

Leu Leu Tyr His Asp Thr Asn
245